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BOROUGH OF HARTLEPOOL



ANNUAL REPORT

of the
MEDICAL OFFICER OF HEALTH
and
SENIOR PUBLIC HEALTH INSPECTOR

On the Health and Sanitary Circumstances
of the Borough
for the Year ended 31st December, 1956

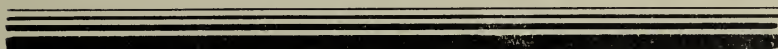
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BOROUGH OF HARTLEPOOL

Members of the Public Health & Housing Committee.

January to April, 1956.

The Mayor (Ald. R. S. Boswell).
Chairman Ald. F. Windebank
Deputy Chairman Coun. Mrs. Flewker
Aldermen—G. Davison
F. Jacques
Wm. C. Pounder
Councillors—O. F. Bradshaw
J. McKenna
Mrs. M. E. Smith
E. Friel
T. Wood
Mrs. D. Charlton

May to December, 1956.

The Mayor (Coun. T. Marine).
Chairman Ald. F. Windebank
Deputy Chairman Coun. Mrs. Flewker
Aldermen—G. Davison
F. Jacques
Wm. C. Pounder
Councillors—O. F. Bradshaw
J. McKenna
Mrs. M. E. Smith
Mrs. D. Charlton
C. Chambers
J. Jones

HEALTH DEPARTMENT STAFF

Part-time Temporary Medical Officer of Health :

M. J. NOLAN, L.C.R.P. & S.I.

Public Health Inspectors, Meat and Food Inspectors :

G. A. WARD, M.S.I.A.

Certificate of R.S.I. and Public Health Inspectors Joint Board.

Certificate of R.S.I. as Inspector of Meat and Other Foods.

O. B. DODDS,

Certificate of R.S.I. and Public Health Inspectors Joint Board.

Pupil Public Health Inspector :

J. F. BURN (from 14/4/1956)

Health Visitors and School Nurses :

Miss A. BENDELOW, S.R.N., H.V., Cert. S.C.M.

Miss M. BUCHANAN, S.R.N., H.V., Cert. S.C.M.

Miss S. HOOD, S.R.N.

Clerks :

Miss J. A. PALLISTER

Miss M. WHEATLEY

Mr. G. H. HEAL

*Health Department,
Frederic Street,
Hartlepool.*

To the Chairman and Members of the Health and Housing Committee.

Mr. Chairman, Ladies and Gentlemen,

I very much regret the delay in presenting the Annual Report for the year 1956 but this has been due to circumstances beyond my control.

The Birth Rate 20.5 shows a slight decrease on last year but is still above the average for England and Wales (15.7).

The Death Rate 10.6 of the population of the Borough was less than the average for England and Wales (11.7).

Deaths from Tuberculosis again shows a welcome decrease, 10 new cases were notified and three deaths occurred against 37 cases notified and 16 deaths in 1950.

It is interesting to note that while the number of cancer deaths from all causes increased by 8 on the previous year, deaths from lung cancer decreased from 7 to 6.

This however should not give rise to complacency as there is undoubted evidence that heavy and prolonged smoking of tobacco, particularly in the form of cigarettes is associated with an increased risk of lung cancer.

For the sixth consecutive year no cases of Diphtheria have been notified.

The registration of children for vaccination against poliomyelitis was commenced early in the year and so far 810 children have been registered.

I wish to express my thanks to the officers and staff of the Health Department for their loyal support and co-operation during the year.

To the Chairman and members of the Health Committee and the members of the Council, my thanks are also due for their support and their interest during the year under review.

I have the honour to remain,

Your obedient servant,

M. J. NOLAN,

Medical Officer of Health.

**BIRTH RATES, DEATH RATES and
ANALYSIS of MORTALITY RATES for the Year, 1956.**

	<i>England & Wales</i>				<i>Hartlepool</i>
	<i>Rates per 1,000 population</i>				
Births—					
Live Births	15.70	18.6*
Still Births	0.36	0.71
Deaths—					
All Causes	11.7	14.6*
Typhoid & Paratyphoid			..	0.00	Nil
Whooping Cough		0.002	Nil
Diphtheria	0.00	Nil
Tuberculosis	0.12	0.18
Influenza	0.05	Nil
Smallpox	0.00	Nil
Acute Poliomyelitis (including polio-encephalitis)		0.02	Nil
Pneumonia	0.23	0.71

*Corrected Birth Rate and Death Rate.

Deaths—					Rates per 1,000 Live Births.	
All causes under 1 year of age		23.8			43.0	
Enteritis and Diarrhoea under 2 years of age		..	..	0.51	Nil	

STATISTICS and SOCIAL CONDITIONS of the AREA.

Area (Acres)	1,841
Population (Census 1951)	17,217
Population (estimated mid 1956)	16,960
Rateable Value	£154,423
Sum represented by 1d. rate	£585 (<i>est.</i>)
Total Number of Dwelling houses at 31.12.56	4,864
Number of new houses completed in 1956	123

POPULATION.

The estimated population mid-1956 as supplied by the Registrar-General was 16,960.

<i>Year</i>	<i>Registrar General's Estimated Population</i>
1946	15,780
1947	16,020
1948	16,660
1949	16,900
1950	16,940
1951	16,990
Population by 1951 Census	17,217
1952	17,080
1953	16,940
1954	16,940
1955	16,900
1956	16,960

The distribution of the population throughout the wards during the year is indicated by the following figures based on the number of electors in each ward :—

St. Hilda—2,906	Station—2,154	Throston—2,333
Central—2,577	Brus—2,649	Hart—4,281

HOUSING STATISTICS

No. of applicants on Waiting List as at 31st December, 1956	899
No. of houses completed and let 1st Jan. to 31st Dec. 1956	123
No. of other houses becoming available for letting during same period 	105
No. of families rehoused as special cases on medical grounds	20
No. of families rehoused on account of Tuberculosis ..	2

The figure of 899 applicants for Council houses must be analysed in order to assess the position wherein there are this number of applicants in a town with 4,864 houses, 1,437 of which have been built since the end of the war and the active slum clearance rehousing.

The applicants can be divided up thus :—

“Doubled-up” families living with relatives 	213
Families having own tenancy but living in overcrowded conditions as assessed by the Council’s point scheme	250
From families having own tenancy but no overcrowding. .	436
	<hr style="width: 100%; border: 0.5px solid black; margin-bottom: 2px;"/> 899 <hr style="width: 100%; border: 0.5px solid black; margin-top: 2px;"/>

50% of the applicants have no real need for rehousing from a health point of view, they quite naturally would like a new house with its corresponding amenities. These applicants however, should only be considered when all other applicants whose applications are based on bad sanitary and health conditions have been disposed of in order of merit.

The figures for families ‘living-in’ shows a slight increase when compared with those given in my report for 1955. The question of living-in with its accompanying moral danger is a very serious one and should be carefully watched. Every effort should be made to reduce the number of these applicants as speedily as possible.

BIRTHS.

There were 347 live births in the Borough in 1956 as compared with 352 in 1955. The crude birth rate for 1956 was 20.5. A glance at the diagram below shows a slight decrease in the birth rate on last year's figures.

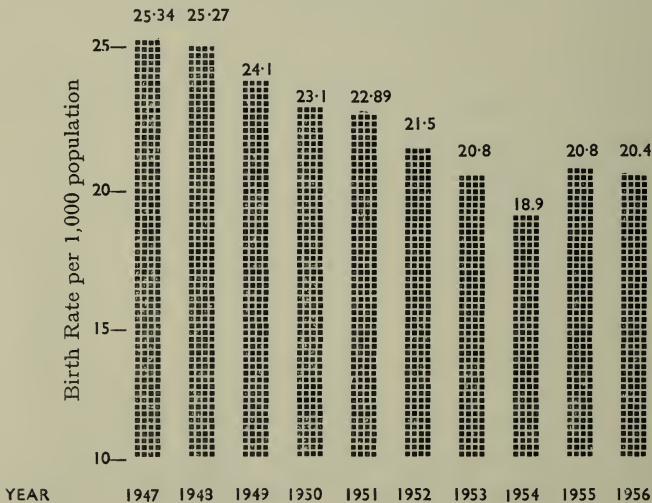
The birth rate for the town, however continues at a level higher than the average for England and Wales.

The total births were made up as follows :—

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Live Births—Legitimate	172	167	339
Illegitimate	3	5	8
Still Births—Legitimate	5	6	11
Illegitimate	—	1	1

Borough of Hartlepool—Crude Birth Rate 1947-1956.

Average 22.31



DEATHS.

There were 179 deaths which in a population of 16,960 makes a crude death rate of 10.6. The crude death rate for 1955 was 11.24.

Borough of Hartlepool.—Table to show causes of death during 1956 together with percentages of the total for the 3 main causes and for Tuberculosis.
(Figures for 1955 are given for comparison).

CAUSES OF DEATH	1955			1956		
	M	F	% of total of main causes of death	M	F	% of total of main causes of death
Tuberculosis, respiratory	1	3	2.1%	1	2	1.6%
Tuberculosis, other	—	—		—	—	
Syphilitic disease	—	—		—	2	
Diphtheria	—	—		—	—	
Whooping Cough	—	—		—	—	
Meningococcal infections	—	—		—	1	
Acute poliomyelitis	—	—		—	—	
Measles	—	—		—	—	
Other infective and parasitic disease	—	—		—	—	
Malignant neoplasm, stomach ..	3	2		7	1	13.9%
Malignant neoplasm, lung, bronchus	6	1	16.8%	5	1	
Malignant neoplasm, breast ..	—	4		—	—	
Malignant neoplasm, uterus ..	—	2		—	2	
Other malignant and lymphatic neoplasms	6	8		6	3	
Leukaemia, aleukaemia	—	2		1	—	
Diabetes	—	—		—	1	
Vascular lesions of nervous system	15	12		19	10	54.1%
Coronary disease, angina	14	7	42.6%	17	11	
Hypertension with heart disease ..	2	3		5	3	
Other heart disease	10	9		6	15	
Other circulatory disease	4	5		6	5	
Influenza	—	—		—	—	
Pneumonia	3	2	11.0%	6	6	12.8%
Bronchitis	12	4		10	1	
Other diseases of resp. system ..	3	—		2	2	
Ulcer of stomach and duodenum ..	4	1		2	—	
Gastritis, enteritis & diarrhoea ..	—	3		—	—	
Nephritis and nephrosis	—	—		—	—	
Hyperplasia of prostate	—	—		—	—	
Pregnancy, childbirth, abortion ..	—	—		—	—	
Congenital malformations	—	1		2	3	
Other defined and ill-defined diseases	15	12		7	4	
Motor vehicles accidents	—	—		—	—	
All other accidents	6	3		1	2	
Suicide	2	—		1	—	
Homicide and operations of war ..	—	—		—	—	

GENERAL PROVISIONS of HEALTH SERVICES for HARTLEPOOL.

Hospitals (under the control of the Hartlepool Hospital Management Committee).

Infectious Diseases. These are admitted to Brierton Hospital which still maintains a number of beds for the common infectious diseases.

Tuberculosis. Brierton Hospital is now the main Hospital for cases of tuberculosis. Cases for whose treatment facilities are not available there, are admitted to hospitals outside the area.

General Hospitals. In March this year certain changes were made regarding the admission of patients to the General Hospitals in this area, so that now the Cameron Hospital deals only with Obstetric and Gynaecological cases.

Hartlepool Hospital admits Accidents, Orthopaedic, Ear, Nose and Throat Cases and Children.

The General Hospital deals with Medical and Surgical cases and the following clinics are also held there :—Ophthalmic, Skin diseases and Psychiatric.

General Medical Practitioners.

The Executive Council for the County of Durham is the body responsible for the administration of the National Health Service insofar as the General Practitioner Service in Hartlepool is concerned.

Midwives. The Domiciliary Midwifery Service is a County Council Service. The Midwives serving Hartlepool are : Nurse E. E. Lee, 13, West View Road, Hartlepool : Nurse E. Foster, 75, Marine Drive, Hartlepool : Nurse Ashton, The Bungalow, Grove Street, Hartlepool.

Home Nursing Service. Home Nursing is the responsibility of Durham County Council. There are two nurses : Nurse Carter, 7, Clifford Close, Hartlepool : Nurse Hart, 7, North Drive, West Hartlepool.

Clinics and Treatment Centres.

Infant Welfare Clinic. Durham County Council Infant Welfare Clinics are held as under :—

Frederic Street Clinic—every Tuesday, 1-30 p.m. to 3-30 p.m.

West View Clinic—every Thursday, 1-30 p.m. to 3-30 p.m.

Sunlight Clinic—every Tuesday morning at Frederic Street Clinic

Ante-Natal Clinics. These Clinics are attended by certain of the general practitioners of the town who see only their own patients. The clinics are held at Frederic Street and Miers Avenue.

School Minor Ailment Clinic. This clinic is held at Frederic Street as follows :—

Monday morning—9-30 a.m. to 11-30 a.m.

Wednesday morning—9-30 a.m. to 11-30 a.m.

Friday morning—treatment only—no doctor in attendance.

Ophthalmic School Clinic. This clinic is held at Frederic Street.

School Dental Clinic. Held on Monday morning and afternoon and Thursday morning at Frederic Street.

Chest Clinic. The chest clinic is held at Brierton Hospital, West Hartlepool for Hartlepool patients by appointment.

Veneral Diseases Clinic. This Clinic is held at the General Hospital, West Hartlepool, as follows :—

Males—Thursdays at 5 p.m.

Females—Mondays at 2 p.m.

Ambulance Service. The Ambulance Service in Hartlepool is a Durham County Council Service. One ambulance is stationed in Hartlepool and is controlled from the West Hartlepool Ambulance Station.

The control is continually manned and receives calls for ambulance transport and transmits necessary instructions. Where necessary the County Ambulance is supplemented by the ambulances of West Hartlepool.

The ambulance stationed in Hartlepool covers also parts of the Stockton Rural area.

Usage of Ambulance Service—Hartlepool, 1956.

	Journeys under- taken	Cases carried			Mileage Travelled
		Stretcher	Sitting	Total	
(a) By County vehicle stationed in Hartlepool	2748 (2094)	4923 (1354)	1659 (4628)	6582 (5982)	30453 (28015)

Figures in brackets are for the year 1955.

NOTE :—In addition to the above, the services of the neighbouring County Depots are also utilised particularly on occasions when economy can be affected by co-ordinating journeys.

Figures of interest as applying on the 31st December, 1956.

Hartlepool children in the care of Durham County Council :

In Children's Homes and Nursery	33
In approved schools	4

Hartlepool persons maintained by Durham County Council :**In residential hostels :**

Males	11
Females	8
Hartlepool persons on the Blind Register	32
Hartlepool persons who are registered Mental Defectives under supervision in their own homes	42
In hospitals for Mentally Defectives	23
Hartlepool persons on Tuberculosis Register	132

PREVALENCE OF AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

The following table gives the number of notifications of cases of infectious diseases and also the number of deaths for 1955 and for 1956.

Prevalence of Infectious Diseases.

Disease	1955		1956	
	Total cases notified	Number of Deaths	Total cases notified	Number of Deaths
Scarlet Fever	5	—	1	—
Measles	43	—	19	—
Pneumonia (Primary & Influenzal)	—	—	—	—
Puerperal Pyrexia	30	—	5	—
Whooping Cough	94	—	44	—
Meningococcal Infection	—	—	1	1
Dysentery	—	—	—	—
Poliomyelitis (Paralytic)	—	—	4	—
do. (Non-Paralytic)	—	—	1	—
Food Poisoning	—	—	2	—

The age-group distribution of cases of infectious diseases for the year 1956 :—

DISEASE	Under 1 year	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65 & over	Total
Scarlet Fever	—	—	—	1	—	—	—	—	—	—	—	—	1
Measles	1	4	2	5	2	5	—	—	—	—	—	—	19
Pneumonia (Primary & Influenzal)	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	7	6	9	4	8	10	—	—	—	—	—	—	44
Meningococcal infection	—	—	—	—	—	—	—	—	—	—	1	—	1
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis P.	1	—	1	2	—	—	—	—	—	—	—	—	4
N.P.	—	—	—	—	—	1	—	—	—	—	—	—	1
Food Poisoning	—	—	—	—	—	—	—	—	—	1	1	—	2

Notifiable Diseases.

The notifiable diseases which are required to be notified to the Medical Officer of Health of districts under the provisions of the Public Health Acts are Smallpox, Cholera, Diphtheria, Membraneous Croup, Erysipelas, Scarlet Fever, Typhus and Enteric or Relapsing Fever.

Apart from these notifiable diseases there are others which include Plague, Cerebro-Spinal Meningitis, Acute Poliomyelitis, Tuberculosis, Ophthalmia Neonatorum, Encephalitis Lethargica, Malaria, Dysentery, Acute Pneumonia, Acute Influenzal Pneumonia, Puerperal Pyrexia, Measles and Whooping Cough.

Under the Food & Drugs Act, 1938, Medical Practitioners are required to notify cases of food poisoning.

Diphtheria.

There were no cases of diphtheria in the Borough during 1956. This is the sixth consecutive year.

The diminution in cases of diphtheria has been one of the outstanding successes of preventive medicine. I mentioned this great achievement in my 1955 report and I wish to emphasise it again. To relax our efforts to maintain this most desired position would be very dangerous.

Immunisation of the child population in Hartlepool is carried out by the local practitioner as well as the School Medical Officer. Sessions for this purpose are held by the School Medical Officer at the Frederic Street Health Centre for schoolchildren. Pre-school children are immunised at the Baby Welfare Clinics at Frederic Street and West View.

Diphtheria Immunisations carried out during the year, 1956.

	<i>Under 5 years</i>	<i>5-14 years</i>	<i>Booster</i>	<i>Total</i>
No. of children immunised . .	160	5	56	221

Scarlet Fever.

There was 1 case notified as Scarlet Fever during the year as compared with 5 in 1955. There were no deaths.

Tuberculosis.

During the year there were 10 new cases notified and there were 3 deaths from this disease. The notification of new cases show a welcome decrease of 10 on the previous year and the lowest reported since 1950, when 37 new cases and 16 deaths were reported.

The figure of 3 deaths is an increase of 1 on 1955, but is still an improvement when compared with previous years.

Acute Poliomyelitis.

There was an outbreak of poliomyelitis during the year 1956. 5 cases were notified 4 paralytic and 1 non-paralytic. No deaths occurred.

During the year a scheme for the vaccination of children against poliomyelitis was introduced. This was on voluntary basis, and because of the limited supplies of vaccine available only children born in the years 1947-54 were considered. It is hoped however that next year a greater supply of vaccine will be available when vaccination can be made on a larger scale.

The number of children reported to have been registered for vaccination is 810. This figure includes those already done, but it is estimated that 78 children 27 males and 51 females will be done this year.

Measles.

The decrease in the number of cases notified has continued.

The table below shows a fall of 24 cases as compared with those notified in 1955, and is comparable with those notified in 1947.

Outbreaks of this disease usually have a 2-year periodicity, this, however is the second year when the outbreak is of a mild nature.

Notified Cases of Measles—Hartlepool.

Year	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956
No. of cases notified	16	426	42	380	234	261	71	392	43	19

Whooping Cough.

Year	1950	1951	1952	1953	1954	1955	1956
No. of cases notified	7	36	160	13	132	94	44

The above table shows a continued decrease in the number of cases of whooping cough notified.

It has been pointed out in previous reports that this disease is the one most in need of action in the form of immunisation and that General Practitioners are already doing this. I believe that it would be a very good thing if the County Council could be persuaded to introduce a scheme of immunisation against this disease.

B.C.G.

Vaccinations of B.C.G. are carried out at Brierton Hospital, West Hartlepool.

Mass Radiography — Chest X-Ray.

The X-Ray Unit again visited the town during the year and in view of last years disappointing results extra efforts were made to induce people to take advantage of the unit's visit. The response to the appeal was extremely disheartening only 371 persons attended for X-Ray. Of these 183 were schoolchildren whose examination was arranged by my Department.

It has been intimated to me by the Organising Secretary that it is most improbable the Mass Radiography Chest X-Ray Unit will visit the town in 1957. This action is to be deplored from the town's health point of view, and I urgently reiterate the remarks I made in my report last year, that results might improve if suitable accommodation could be found in West View area.

NOTE. The estimated cost of the units visit approximately £100. 4 people were referred to Hospital making the cost per person roughly £25.

INFANT WELFARE SERVICES.

The basis of the child welfare service is the work undertaken by the Health Visitors. It should be emphasised that the Health Visitor is highly qualified and that besides being a trained nurse she is invariably a fully-qualified midwife and has undergone extensive training for her Health Visitors Certificate.

The main function of the Health Visitor is the supervision of the health of the child up to the age of 5 years. She also undertakes duties in connection with mental defectives, Tuberculosis patients, old people discharged from hospital and other duties connected with the School Health Service. It must always be pointed out that the Health Visitors are willing to help the local practitioner whenever they can.

Work done by the Health Visitors during the year, 1956.**DOMICILIARY VISITS.**

The total number of effective visits paid :—

1. Maternity and Child Welfare	4,385
2. Tuberculosis	417
3. Mental Deficiency	145
4. School	164
5. Aged people	23
	<hr/>
	5,134
	<hr/>

Summary.

Ineffective visits	373
Total number of visits	5,507
Time (as days) spent on visits (routine, other and in-effective	242
Average number (daily) of effective visits per health visitor	21

CLINICS, ETC., WORK.

Time (as days) spent :—

(a) at maternity and child welfare centres ..	141
(b) at chest clinics	55
(c) at special schools	10

Infant Welfare Centres.

The total numbers attending the two Centres continues to show a downward trend. I had anticipated that because of the transfer of families to West View the Centre situated in Miers Avenue would show a corresponding increase in numbers. This has proved to be correct in relation only to the children whose ages are under 1 year, but the age group 1—5 years still shows a big decrease.

Child Welfare Centres — Attendances, 1956.

Centre	Children		Children attending for first time	
	Under 1 yr.	1-5 yrs.	Under 1 yr.	1-5 yrs.
Frederic Street	1224 (1702)	131 (221)	114 (140)	9 (10)
West View	1232 (1082)	122 (184)	130 (11)	2 (15)
Totals	2456 (2784)	253 (405)	144 (251)	11 (35)

Figures for 1955 are given in brackets .

Ante Natal Clinics.

Ante-Natal Clinics are held at both Frederic Street and West View Clinics. During the year only two practices in the town availed themselves of the facilities offered whereby the clinics may be used by the general practitioners for the purpose of holding an ante-natal clinic with the midwives in attendance. The table of attendance shows a decrease in attendance figures over the previous year.

Ante-Natal Clinics—

Attendance 1956 with figures for 1955 in brackets.

<i>Centre</i>	<i>No. of Attendances</i>	<i>Average per Session</i>
Frederic St.	158 (186)	7 (9)
West View	24 (29)	3 (9)
Total	182 (215)	10 (18)

INFANTILE MORTALITY.

Causes of Infant Deaths in relation to age.

DISEASE	Under 1 wk	1-2 wks	2-3 wks	3-4 wks	Total under 4 wks	1 month & under 3 mths	3-6 mths	6-9 mths	9-12 mths	Total
Prematurity	2	—	—	—	2	—	—	—	—	2
Atelectasis	2	—	—	—	2	—	—	—	—	2
Acute congestion of lung	—	—	—	—	—	—	1	—	—	1
Purulent Meningitis ..	—	—	—	—	—	1	—	—	—	1
Convulsions	—	—	—	—	—	—	—	1	—	1
Broncho Pneumonia..	—	2	1	—	3	1	1	—	—	5
Anacephaly	1	—	—	—	1	—	—	—	—	1
Spina Bifida	1	—	—	—	1	—	—	—	—	1
Cerebral Haemorrhage	1	—	—	—	1	—	—	—	—	1

Domiciliary Midwifery.

During the year the 3 County Midwives working in the Borough delivered and nursed 194 cases and attended 53 patients discharged home from Hospital before the 14th day, making a total of 247 cases. Figures for the previous three years are set below :—

Births attended by County Midwives 1954, '55 and '56

	1954	1955	1956
Total births (live and still) ..	332	361	359
Cases attended as midwife and nurse	165	172	194
Hospital patients discharged home before 14th day ..	—	—	53
Total cases attended	165	172	247

Home Nursing.

There are two nurses working in the town. The figures given in the table below show the No. of visits and new cases, Medical and Surgical over the past three years. Whilst these figures show an occasional increase or decrease there is no escaping the fact that these nurses are doing a real job of work especially when dealing with cases of a chronic nature. Hospitals and particularly the general practitioner will no doubt readily appreciate this service.

The figures for 1956 include 77 visits to 18 patients under 5 years of age and 3,695 visits to 121 cases over 65 years of age.

Visits for injections only — 1,983.

Care and After Care.

The Stock of nursing equipment made available by Durham County Council and held in store at the Health Centre, Frederic Street, has been in great demand. This easy method of obtaining these very necessary articles when required is proving of great help to local practitioners and district nurses in their daily work with the sick.

The School Health Service.

The School Health Service in Hartlepool is the responsibility of the Durham County Council. I am unable to report on the work done by this important service during the year 1956. The Deputy Principal School Medical Officer has intimated to me that he is unable to supply any statistics.

Visits by District Nurses, 1954, 1955 and 1956.

	1954		1955		1956	
	<i>New Cases</i>	<i>Visits</i>	<i>New Cases</i>	<i>Visits</i>	<i>New Cases</i>	<i>Visits</i>
General—						
Medical	344	5,891	277	5,932	305	5,666
Surgical	43	1,391	47	1,136	35	820
Tuberculosis	20	473	15	470	15	582
Maternal Complicat'ns	—	—	—	—	1	5
Totals ..	407	7,755	339	7,538	356	7,073

Prematurity and Atelectasis remain much about the same. Both these causes are due to the non-expansion of the lungs. During the year there were 5 deaths which might have been avoided.

Infantile Mortality.

The number of deaths of infants under 1 year of age for the year 1956 was 15. The Infantile Mortality Rate was thus 43.

Appendix II shows how the Infantile Mortality Rate for Hartlepool has altered since 1941. The England and Wales figures have been plotted for comparison.

The causes of death in the 15 cases are given in tabular form above.

Maternal Mortality.

There were no deaths under the heading Pregnancy, Childbirth and Abortion. This is the second year that no deaths under this heading were reported.

Domestic Help Service.

This service is continuing its good work. It has been reported, however, that families and neighbours are so helpful that the demand in Hartlepool on this service is not so great.

Domestic Help Cases during 1956.

Routine Cases.

No. of cases being assisted 1st January, 1956	..	58
No. of new cases	16
		<hr/>
		74
		<hr/>

Cases being assisted on 31st December, 1956	..	55
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Categories :—

Old Age Pensioners	..	64
Maternity Cases	..	2
Tuberculosis	6
Others	2
	<hr/>	<hr/>
		74
		<hr/>

No. of home helps employed — 24.

ANNUAL REPORT of the SENIOR PUBLIC HEALTH
INSPECTOR for the Year 1956.

*Health Department,
Frederic Street,
Hartlepool.*

Mr. Chairman, Ladies and Gentlemen,

Very good progress was made during the year with slum clearance and 171 houses in two compulsory purchase orders were represented and inspection of a further 87 in a third area completed. This acceleration of effort was necessary because with the Council's decision to cease building for ordinary list cases there was no pool of houses in confirmed areas from which tenants could be drawn for houses under construction. There was no rehousing outstanding from previous areas when the change of policy took place. This extra effort was only made possible by increase of staff and can only be maintained if staff is kept at its present level.

By the year end 655 houses had been dealt with in 21 post-war areas and 837 houses demolished including houses in pre-war areas and voluntary demolitions. Redevelopment on cleared sites had been completed in respect of 182 houses, 93 flats and 20 special dwellings and a further 47 houses and 12 flats were in course of erection.

The year end was about the half way mark in the Council's slum clearance programme.

The foregoing shows the intensity of slum clearance work, which has always been top priority, and has offset achievements in other fields of environmental hygiene. Work was put in hand under the new Hygiene Regulations, all food traders supplied with a precis of the requirements of the regulations, and a limited number of inspections carried out to major establishments and notices of defects and requirements issued but a regular follow up is not practicable and can only take place as and when other duties allow.

Likewise at the year end the attention of industrialists was drawn to the provisions of the new Clean Air Act and an up to date assessment of this position being drawn up.

In conclusion I would like to express my thanks to all colleagues for helpful co-operation during this year.

I am, Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

G. A. WARD.

Senior Public Health Inspector.

GENERAL SANITARY WORK.

The impact of slum clearance on the bad houses and the continued clement weather has meant a reduction in the amount of time that has had to be spent on property repairs ; first mentioned last year.

A total of 751 houses were inspected during the year and 914 re-inspections were made in respect of properties under notice. 221 informal notices were served in respect of 237 houses with regard to nuisances existing thereon and 147 notices affecting 166 houses were complied with. On the authority of the Committee 51 Statutory Notices were served in the year with respect to 53 houses and 52 such notices were complied with in respect of 58 houses. 8 houses were repaired on verbal instructions.

It is to be noted that 7 Statutory Notices not fully complied with were abated on default of the owner to 7 houses and the necessary action taken to recover the expenses incurred which amounted to a total of £59 2s. 4d. Total payments for repairs on default recovered during the year were £103 11s. 10d.

To summarise, a total of 272 notices were served in respect of 290 houses and 199 such notices were complied with to 224 houses.

SANITARY INSPECTION OF THE DISTRICT.

Dwellinghouses.			<i>Inspection</i>	<i>Re-inspection</i>	<i>Total</i>
Notifiable diseases	..	..	35	—	35
Other Diseases	..	..	2	—	2
Verminous Premises	..	..	8	4	12
Dirty Premises	..	..	2	1	3
Overcrowded condition	..	..	1	—	1
Houses let in lodgings	..	..	—	—	—
Housing and Public Health Acts	..	..	751	914	1665
Water Supply	..	..	—	—	—
Animals, etc., kept	..	..	—	—	—
Supervision of removals	..	..	240	—	240
Rat-infested premises	..	..	115	738	853
Other Premises.					
Tents, Vans, Sheds	..	..	50	—	50
Stables	..	..	1	—	1
Offensive Trades	..	..	11	—	11
Marine Stores	..	..	—	—	—
Accumulation of rubbish	..	..	—	—	—
Factories with mechanical power	..	..	53	8	61

Other Premises	<i>Inspection</i>	<i>Re-inspections</i>	Total
Factories with no mechanical power	2	—	2
Workplaces	—	—	—
Places of Public Entertainment	4	2	6
Sale of Rag Flock	—	—	—
Pet Animals Act	11	2	13
Schools	12	12	24
Atmospheric Pollution.. ..	37	—	37

Food Premises.

Licensed Premises	38	12	50
Meat Shops	15	4	19
Provision Shops	53	3	56
Fish Shops	13	4	17
Milk Shops and Dairies	26	2	28
Restaurant Kitchens	25	23	48
Bakehouses	8	2	10
Ice-cream Premises	29	2	31

Miscellaneous—Action Taken.

No. of complaints investigated during year	..	..	316
Informal Notices served .. ..	..	..	221
Informal notices complied with .. ..	..	..	147
Second or reminder notices sent .. ..	..	..	115
Nuisances abated without service of written notice			8
Statutory notices served .. ..	..	..	51
Statutory notices complied with .. ..	..	..	53
Notices abated on default of owner .. ..	..	..	7
Warning letters sent .. .. .	..	..	11
Interviews with owners .. .. .	..	..	71
Interviews with builders .. .. .	..	..	57

PUBLIC HEALTH ACT, 1936.

Derelict Property.

During the year 9 derelict houses have been demolished by the owner.

During the past 7 years 194 derelict houses have been demolished voluntarily and the majority of the sites thus cleared have been subsequently acquired compulsorily by the Council and re-developed.

Vermin Infestation.

There has been no variation in the methods used from previous years, i.e., liquid and powder insecticide.

Bug-infested houses dealt with numbered only 13, all slight and 9 in old Council leasehold houses.

The furniture and effects of 240 tenants were inspected and disinfested as necessary prior to rehousing taking place and verminous properties thus rendered vacant were disinfested prior to re-letting.

A total of 238 houses were treated during the year for vermin infestation as below :—

Bug-infested	13	Silver Fish	10
Black beetles	176	Wood-boring beetles	14
Fleas	22	Ear Wigs	3

Places Public Entertainment.

An inspection of these premises revealed that generally speaking the standard of sanitary accommodation was bad and notices were served in respect of all 4 premises and by the year end improvements had been agreed to.

Atmospheric Pollution.

The methods in use for the measurement of air pollution were increased by the addition of a sulphur di-oxide gauge adjacent to the standard deposit gauge on the headland, which was brought into operation in June, 1956. Details of observations are included in table III.

The Council still maintain its membership of the Tees-side Smoke Abatement Advisory Committee which Committee remains active.

The success of measures taken some years ago is now becoming apparent and there has been a very marked reduction in the coal dust nuisance from the coaling staiths, despite increasing shipments, due to washing or spraying of coal at the collieries. Diesel shunting locomotives are now largely employed on the staiths, and the conversion is expected to be complete by the time the relevant part of the Clean Air Act is in operation. This has led to a pronounced reduction of smoke and steam in the adjoining built up area—now being actively redeveloped.

The question of replacement of old and possibly under-powered tugs is under active consideration.

The severe nuisance that has arisen in the past few years from the chemical works has been largely overcome with the solving of the corrosion problems that had arisen with the precipitators. After modifications, the second precipitator was brought into operation for the first time but the modifications effected to both

precipitators would appear to have impaired their efficiency somewhat, but they can operate for a sustained period without a major stoppage. There is a possibility of a limited nuisance in the immediate neighbourhood, under certain weather conditions that did not operate in last year's abnormal summer, but a major improvement has been effected. The position will, however, have to be closely watched in view of the proposed works extension when an additional washtower is to be provided but no additional precipitator as it is thought that the capacity of the existing two is sufficient to cope with the output when the new kiln is installed.

Offensive Trades.

Premises—Fish-curing	4	Miscellaneous	2
----------------------	---	---------------	---

One establishment carrying on the trade of fish-curiers had the annual licence renewed for a further period of twelve months.

Curing is now only carried on at a relatively small scale.

Informal action, indicated below had to be taken on occasions to abate the nuisance :—

Rubbish	1	No Hot water	1
---------	---	--------------	---

Water Supply.

The supply is provided by the Hartlepool Water Company and is adequate in quantity and of good quality. The supply is obtained from boreholes in West Hartlepool and one at Naisberry. Additional boreholes have been provided at Dalton Piercy and a reservoir and additional boreholes are in course of construction. All boreholes in use are through magnesium limestone and the water from Naisberry though hard is only about half the hardness of the existing supply. It is hoped that in due course the whole of the town supply will be from the sources outside the town which should result in an appreciable softening of the supply. The supply is chlorinated prior to pumping into storage tanks.

Bacteriologically the supply is class 1 as routine sampling from a number of points in the supply area rarely shows any deviation from :—

probable number of coliform bacilli; MacConkey 2 days,
37°C—0 per 100 ml.

A specimen chemical analysis is shown below :—

				<i>Parts per 100,000</i>
Chlorine as Chlorides				22.2500
Nitrogen as Nitrates				0.1119
Ammonia				0.0039
Albuminoid Ammonia				0.0018
Oxygen Absorption				0.0280
Injurious Metals				None
Total Solid Matter dried @ 100°C.				110.0000
pH value of Sample				7.5
				<hr/>
Temporary Hardness ..	24.7	Degrees		
Permanent Hardness ..	33.3	„		
Colour of sample on Hazen Scale				3
Appearance of Sample in 2-foot tube				Not quite clear
Odour when heated to 50°C... ..				None
				<hr/>

Microscopical Examination.

Satisfactory.

Observations.

The analysis of this sample shows that it is free from undesirable drainage when judged by the amounts of nitrogenous constituents and the oxidisable organic matter measured by the oxygen absorbed, and as it is of normal composition for the area, no exception could be taken to it for human consumption.

HOUSING ACTS, 1936-1956.

Housing Repairs and Rents Act, 1954.

Slum Clearance.

Rehousing from 5 compulsory purchase orders, confirmed late in 1955, was completed early in the year. A total of 80 persons were rehoused from condemned properties and 178 houses demolished.

Because of the proposed reduction in house building for agreed list cases and because all rehousing was completed in confirmed areas emergency steps had to be taken to deal with additional areas to provide tenants for houses being built. The following two areas were dealt with and by the year end inspection of 87 houses in a third area had been carried out :—

<i>Date</i>			<i>No.</i>		<i>Local</i>	
<i>No.</i>	<i>Represented</i>	<i>Site</i>	<i>houses</i>	<i>persons</i>	<i>Enquiry</i>	<i>Confirm'd</i>
60	14/3/56	Dock St. Area	107	293	4/9/56	7/11/56
61	5/9/56	Mary St. Area	64	163	pending	—

All areas are dealt with by Compulsory Purchase Order.

Redevelopment of sites cleared earlier was in hand by the year end.

Redevelopment of cleared sites has proceeded rapidly and a total of 182 houses, 93 flats and 20 special dwellings have been already completed as part of the Council's redevelopment programme ; a further 12 flats and 49 houses were in hand at the year end.

Individual Unfit Houses.

During the year 23 Closing Orders were made, 61 persons were rehoused from 16 houses subject to a Closing Order ;

Demolition Orders were made in respect of 2 houses and 2 houses demolished.

In addition to the making of formal closing orders, informal action secured the voluntary closing of 5 houses and the rehousing of 5 families of 13 persons. 9 houses thus vacated were demolished voluntarily, a total of 77 houses have thus been closed. The House Management Committee rehouse on my certificate as to the insanitary conditions of the house and on written undertaking from the owner not to re-let.

Overcrowding.

It is impossible to give an accurate picture of the present overcrowding position without carrying out a fresh survey.

Housing Statistics.

- | | | | | | | | |
|---|---|----|----|----|----|----|------|
| 1. Inspection of dwelling houses during the year :— | | | | | | | |
| (1)(a) | Total number of dwellinghouses inspected for housing defects under the Public Health or Housing Acts | .. | .. | .. | .. | .. | 751 |
| (b) | Number of inspections made for the purpose | .. | | | | | 1665 |
| (2)(a) | Number of dwellinghouses [included under sub-head (1)] above which were inspected and recorded under the Housing Consolidation Regulations, 1925-1932 | .. | .. | .. | .. | .. | 196 |
| (b) | Number of inspections made for the purpose | .. | | | | | 563 |
| (3) | Number of dwellings found to be in a state so dangerous or injurious to health as to be unfit for human habitation | .. | .. | .. | .. | .. | 196 |

(4) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	237
2. Remedy of defects during the year without the service of formal notices :—	
Number of defective dwellinghouses rendered fit in consequence of informal action by local authority or their officers	166
3. Action under Statutory Powers during the year :—	
A. Proceedings under sections 9, 10, and 16 of the Housing Act, 1936 :—	
(1) Number of dwellinghouses in respect of which notices were served requiring repairs	33
(2) Number of dwellinghouses which were rendered fit after service of formal notices :—	
(a) by owners	34
(b) by local authority in default of owners ..	6
B. Proceedings under the Public Health Acts :—	
(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied ..	20
(2) Number of dwellinghouses in which defects were remedied after the service of formal notices :—	
(a) by owners	17
(b) by local authority in default of owners ..	1
C. Proceedings under sections 11 and 13 of the Housing Act, 1936 :	
(1) Number of dwellinghouses in respect of which Demolition Orders were made	2
(2) Number of dwellinghouses demolished in pursuance of Demolition Orders	2
(3) Orders determined	—
D. Proceedings under section 12 of the Housing Act, 1936 :—	
(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ..	14
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined the tenement or room having been rendered fit	Nil

E. Proceedings under section 3 of the Housing Act, 1949 :—		
(1) Closing Orders made under section 3(1)	Nil	
(2) Demolition Orders determined and Closing Orders substituted under section 3(2)	Nil	
F. Proceedings under section 10 of the Local Government (Miscellaneous Provisions) Act, 1953 :—		
Closing Orders made under section 10(1)	9	
G. Clearance Areas—		
(1) Total number of unfit houses demolished	178	
(2) Total number of other houses demolished	1	
(3) Number of persons displaced from unfit houses	80	
(4) Number of persons displaced from other houses	—	
4. Housing Repairs and Rents Act, 1954.		
(1) Application for disrepair certificate where repairs increase has been claimed—granted	2	
(2) Application for disrepair certificate where repairs increase has been claimed — refused	—	
(3) Application for disrepair certificate where no repair increase has been claimed—granted	2	
(4) Application for disrepair certificate where no repair increase has been claimed — refused	—	
(5) Application for certificate of revocation after repairs have been carried out under (1) above—granted	1	
(6) Application for certificate of revocation after repairs have been carried out under (1) above—refused	—	
(7) Application for certificate of revocation after repairs have been carried out under (3) above—granted	1	
(8) Application for certificate of revocation after repairs have been carried out under (3) above—refused	—	
5. Housing Acts, 1949—Improvement Grants.		
No. applications submitted separate houses	6	
No. applicants registered	—	
Total number houses for which applications granted	12	

FOOD AND DRUGS ACT, 1955.

<i>Type of Establishment and No. at year end</i>	<i>Prov. Shops 77</i>	<i>Fish Shops 12</i>	<i>Bake- houses 12</i>	<i>Catering 25*</i>	<i>Licensed Premises and Clubs 41</i>	<i>Butchers Shops 18</i>	<i>Total 185</i>
No. Registered Sec. 13	—	3	—	—	—	8	11
Defects Remedied—							
Lack Cleanliness ..	2	—	—	1	—	1	4
„ Hot Water ..	2	—	—	—	—	—	2
„ Soap & Towels ..	1	—	—	8	22	1	32
„ Light/Ventilation ..	—	—	—	1	—	—	1
„ Decoration ..	1	—	1	1	5	—	8
„ Clothing/head covs. ..	—	—	—	2	—	—	2
„ First Aid ..	12	—	3	20	17	1	53
Defective San. Accom. ..	1	—	—	1	12	1	15
„ Drainage ..	—	—	—	—	3	—	3
„ Water Supply ..	—	—	—	—	—	—	—
„ Bins ..	—	—	—	—	—	—	—
„ Structure ..	—	—	1	2	4	—	7
No sink and/or defective ..	—	—	2	—	1	1	4
No handbasin &/or defec. ..	14	—	3	20	22	—	59
No hot water fitted ..	2	—	—	20	—	—	22
No clothes locker ..	8	—	—	9	7	—	24
Rubbish ..	—	—	—	2	—	—	2
Animals/birds kept ..	1	—	—	—	—	—	1
Total Defects ..	44	—	10	87	93	5	239
Total Inspections ..	56	17	10	48	50	19	200

*Private 11; Works 4; School 10.

A precis of the new regulations was supplied to all establishments requesting that the necessary steps be taken to implement the regulations. As pressure of other work permitted, routine inspections were made of premises and a list of requirements submitted to the occupier but it only proved possible to deal with a few of the larger establishments. 32 written notices were served.

The regulations have on the whole been well received.

No special propaganda has been undertaken.

Inspection of all food vans etc., at the August carnival showed that generally speaking they were of a high standard and well equipped and a tentative agreement was reached with the Showmen that in future years no vans be sold sites that did not declare that their vans reached the standard prescribed by the Food Regulations.

Ice Cream premises registered for retail sale are nearly all provision shops.

Premises registered are given below :—

Premises registered for manufacturing ice cream	3
Premises registered for sale of ice cream	.. 62
Premises registered and selling ice cream	.. 49

and a total of 31 inspections were made for this class of trade.

Inspection of Meat and Other Foods.

18 inspections of meat and other foods were carried out during the year at retail shops and canteens and weight of food condemned amounted to 8 cwts. 3st. 6 lbs.

Food Condemned :—

Tinned Milk	..	..	..	12 lbs.
Tinned Vegetables	..	..	5 st.	2 lbs.
Tinned Fruit	..	..	2 st.	5 lbs.
Tinned Meat	..	..	2 st.	10 lbs.
Meat	..	..	52 st.	9 lbs.
Fish	..	..	..	—
Butter and Margarine	..	..	2 st.	0 lbs.
Gelatin	..	..	1 st.	10 lbs.

Condemned food is destroyed by the Council.

Slaughterhouses and Slaughter of Animals Acts.

All slaughtering is still carried out at the Municipal abattoir of an adjoining authority.

PUBLIC HEALTH (MEAT REGULATIONS), 1924.

No formal action was called for under this regulation during the year.

Milk and Dairies' Regulations, 1949-1953.

Persons and premises registered under the above orders at the year-end are as follows :—

Distributors with retail dairy premises in the town	5
Distributors with no retail premises in the town	3
	— 8
Retail purveyors of bottled milk only from shops	44

The town is included in a specified area for the sale of designated milk only.

Informal action had to be taken in respect of structural defects and decoration at one dairy.

MILK (SPECIAL DESIGNATIONS), 1940-1953.

Licences granted under these orders and in force at the year end are as follows :—

	<i>Dealer's Licences</i>	<i>Supplementary Licences</i>
Tuberculin Tested Milk ..	13	3
Pasteurised Milk	14	3
Sterilised Milk	47	2

Both T.T. and Pasteurised milks on sale in the town are each derived from 3 sources and the supply position and the quality was well maintained.

Purity of Milk Supplies — Bacteriological Examination.

T.T. Pasteurised Milk. All 19 samples submitted for examination passed the Methylene Blue test as to keeping quality and 8 the Phosphatase test as to efficiency of pasteurising.

Pasteurised Milk. 13 samples were submitted of which all passed the Methylene Blue and the Phosphatase tests.

A representative number of these samples were of school milk.

Sterilised Milk. 21 samples submitted passed the test.

The quality of the milk on retail sale can be said to be very satisfactory.

ICE CREAM (Heat Treatment) REGULATIONS, 1949-52.

Of the 3 registered manufacturers in practice only 1 now manufactures a cold mix. All other ice cream on sale from shop is obtained wholesale and is prepacked.

Of the 43 samples procured for examination for provisional grading under the regulations 38 or 88% were satisfactory. Out of the 5 unsatisfactory samples, from only 2 producers, 3 were from one source.

Nevertheless the results are a very considerable improvement on previous years.

Detailed results are tabulated below. :—

	<i>Sample Results</i>			
	<i>Satisfactory</i>		<i>Unsatisfactory</i>	
No. of producers sampled	Grade 1	Grade 2	Grade 3	Grade 4
9	35	3	2	3

FACTORIES ACT, 1937-1944.

Little arose during the year that calls for comment.

Most factories now maintain adequate supervision, and more voluntary modernisation and improvements that could not be called for under legislation were carried out.

Details of inspections carried out and defects discovered are indicated in the following table :—

1. Inspections for the purpose of provisions as to health (including inspections made by S.I.).

PREMISES	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which sections 1, 2, 3, 4 & 6 are to be enforced by Local Authorities	11	2	1	—
(ii) Factories not included in (i) in which section 7 is enforced by the Local Authority	61	56	15	—
(iii) Other premises in which section 7 is enforced by the Local Authority (excluding out-workers' premises)	5	5	—	—
TOTAL	77	63	16	—

2. Cases in which defects were found.

Particulars	Number of cases in which defects were found				Number of cases prosecuted
	Found	rem- edied	To H.M. Inspector	By H.M. Inspector	
Want of cleanliness	6	6	—	—	—
Overcrowding ...	—	—	—	—	—
Unreasonable temperature	—	—	—	—	—
Inadequate ventilation	—	—	—	—	—
Ineffective drainage of floors	1	1	—	—	—
Sanitary Conveniences					
(a) insufficient	2	—	—	—	—
(b) unsuitable or defective	17	10	—	—	—
(c) not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offen- ces relating to outwork)	—	—	—	—	—
TOTAL	21	12	—	—	—

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

Work under this Act was maintained at a steady level comparable with last year.

Infestation of dwellinghouses was principally sporadic in nature but some trouble was experienced on new building sites.

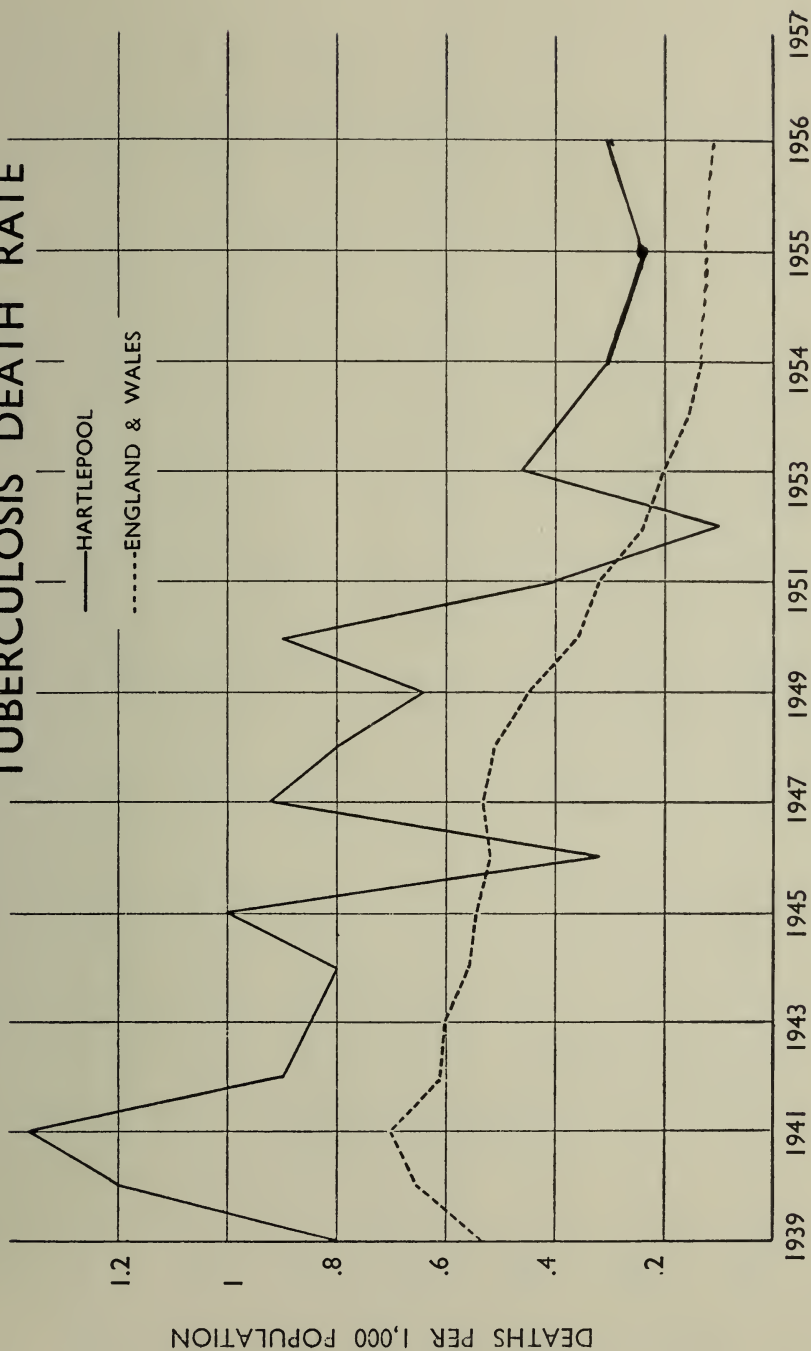
No formal action had to be taken.

PREVENTION OF DAMAGE BY PESTS ACT, 1949.

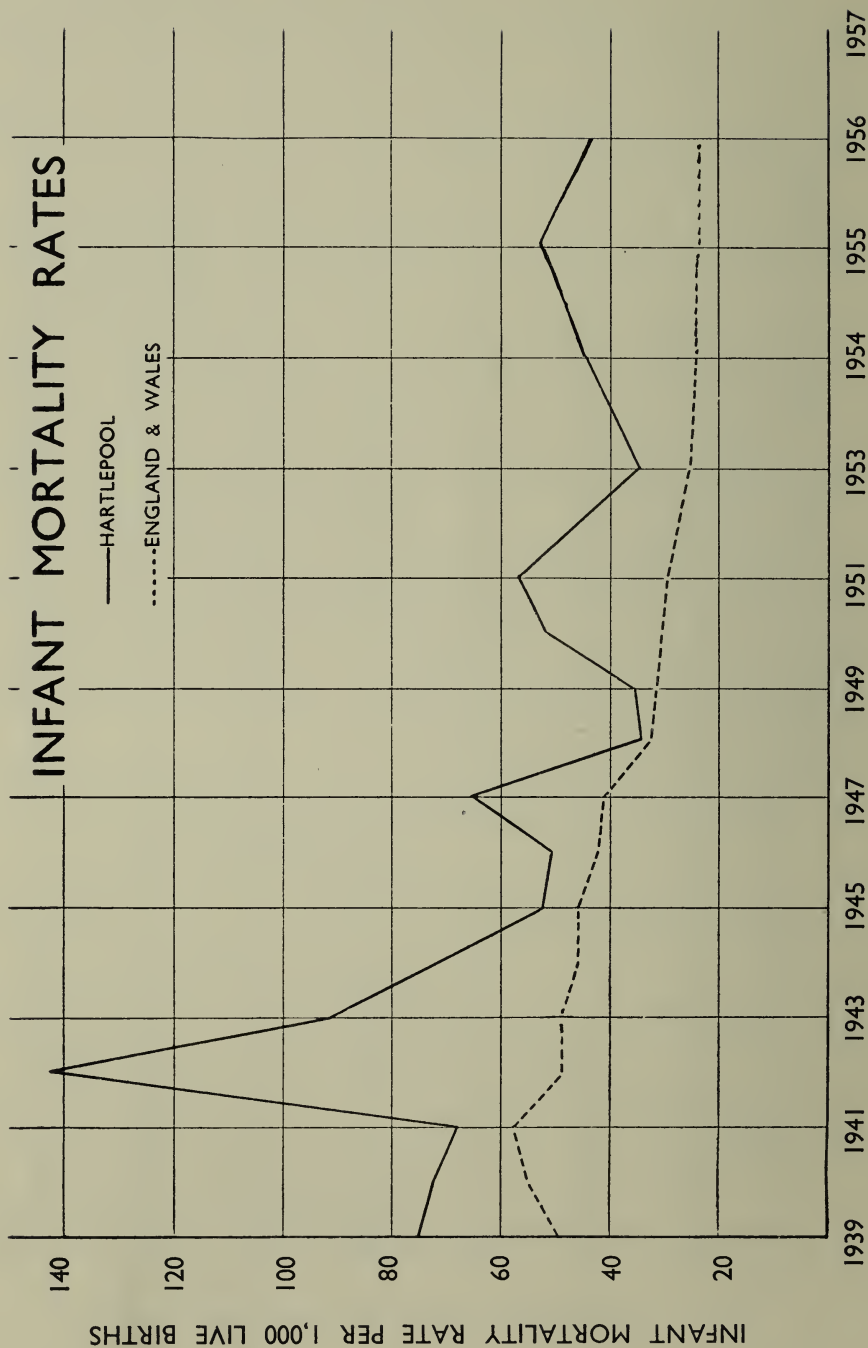
	TYPE OF PROPERTY				
	(1) Local Author- ity	(2) Non-Agricultural Dwelling Houses (incl. Council Houses)	(3) All other (incl. Business Premises)	(4) Total of Cols. (1), (2) & (3)	(5) Agricultural
I No. of properties in Local Author- ity's District ..	42	4857	631	5530	5
II No. of properties inspected as a result of :—					
(a) Notification	4	63	11	79	—
(b) Survey under the Act.. ..	5	29	3	37	—
(c) Otherwise (e.g. when visited primarily for some other pur- pose)	6	—	172	178	—
III Total inspections carried out— including re-inspections (to be com- pleted only if figures are readily available)	255	495	103	853	12
IV No. of properties inspected (in Sec. II) which were found to be infested by :—					
(a) Rats { Major.. .. .	5	1	1	7	—
{ Minor.. .. .	1	25	6	32	—
(b) Mice { Major.. .. .	—	—	—	—	—
{ Minor.. .. .	2	26	7	35	—
V No. of infested properties (in Sec. IV) treated by the L.A. (Figures should NOT exceed those given at Sec. IV)	8	52	14	74	—
VI Total treatments carried out— including re-treatments. (To be completed only if figures are readily available)	8	44	14	66	—
VII No. of notices served under Sec. 4 of the Act :—					
(a) Treatment	—	—	—	—	—
(b) Structural Work (i.e., Proofing)	—	—	—	—	—
VIII No. of cases in which default action was taken following the issue of a notice under Sec. 4 of the Act	—	—	—	—	—
IX Legal Proceedings	—	—	—	—	—
X No. of "Block" control schemes carried out	9	10			

APPENDIX I

TUBERCULOSIS DEATH RATE



APPENDIX II



APPENDIX III.
DEPOSIT GAUGES, ANNUAL TOTALS, MONTHLY AND FIVE-YEARLY AVERAGES.
Gray Square New Cemetery

Year	1952	1953	1954	1955	1956	Average 5 years 1956	Average 5 years 1955	1952	1953	1954	1955	1956	Average 5 years 1956	Average 5 years 1955
Suspended Solids	182.94	144.35	146.74	109.74	121.31	141.01	148.52	95.96	80.53	56.07	63.81	84.61	76.19	75.06
Dissolved Solids	246.88	150.42	194.95	195.81	243.64	206.34	188.15	111.34	90.19	100.73	123.48	123.06	111.56	105.55
TOTAL	429.82	294.48	341.30	305.55	364.95	347.22	336.67	207.30	170.72	156.80	187.29	207.67	185.96	180.60
Monthly Average	35.81	24.54	28.44	25.46	30.41	28.93	28.05	17.27	14.22	13.06	15.60	17.30	15.49	14.89
Rainfall Total	19.42	14.35	25.45	15.45	22.28	19.19	20.54	21.73	16.67	25.41	18.22	22.68	20.94	22.53
Monthly Average	1.62	1.19	2.12	1.26	1.86	1.61	1.71	1.81	1.39	2.11	1.52	1.89	1.74	1.87

WIND DIRECTIONS %	Wind										No Record	
	Year	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm		
	1952	7.3	12.3	2.2	3.8	6.4	36.6	8.7	12.4	9.6	.27	
	1953	5.5	10.2	2.6	4.7	14.8	39.8	5.3	8.4	7.5	.6	
	1954	8.7	10.6	1.2	7.8	12.4	38.0	5.7	10.6	1.7	7.3	
	1955	8.9	12.3	4.0	2.5	15.9	27.0	11.5	11.7	2.1	4.1	
	1956	9.6	11.8	4.2	5.4	25.2	22.5	11.1	7.2	1.9	.1	
Average 5 yrs. to 1956		8.0	11.4	2.8	4.8	14.9	32.8	8.4	10.1	4.5	2.5	
5 yrs. to 1955		7.3	11.4	2.4	4.9	11.8	35.7	7.3	10.2	5.6	3.6	

RECEIVED
A 21 AUG 58
C.R.
93

F. W. Mason, 53 Southgate, Hartlepool.